

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF RECLAMATION

ATTACHMENT 20
(SEDIMENTATION POND/IMPOUNDMENT DATA SHEET)

Applicant's Name Bennoc, Inc. Pond # 018

Type of impoundment Excavated Permanent , Temporary X

1. POND DRAINAGE AREA DATA:

- a) Drainage area 10 acres
- b) Disturbed area 10 acres
- c) Ave. land slope 10 %
- d) Hydrologic soil group C
- e) Hydraulic length 450 ft.
- f) Cover/condition of the undisturbed area N/A

2. DESIGN STORM CRITERIA:

a) Method:

- 1) Design method (s) including computer programs: SEDCAD 4.0
- 2) SCS curve number 85

b) Rainfall Amount/Peak Flow	Rainfall, in.	Peak flow, cfs.
1) 10 year, 24 hour =	<u>3.7</u>	<u>22</u>
2) 25 year, 24 hour =	<u>4.3</u>	<u>27</u>
3) 50 year, 6 hour = (if permanent)	<u> </u>	<u> </u>
4) 100 year, 6 hour = (if 20/20 size)	<u> </u>	<u> </u>

3. POND SIZE:

a) Dimensions: N/A Pond is totally excavated.

- 1) Dam height ft.
- 2) Dam width ft. (MIN)
- 3) Dam length ft.
- 4) Dam downstream slope % (MAX)
- 5) Dam upstream slope % (MAX)
- 6) Core length ft. ft. ft.

b) Sediment storage volume 3.73 ac. ft. is provided below the 1098.0 foot elevation.

c) Stage/Area Data:	Elevation ft.	Surface Area ac.	Volume ac.ft.
1) Bottom of pond	<u>1092.0</u>	<u>0.50</u>	<u>0</u>
2) Streambed at upstream toe:	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
3) Principal spillway inlet:	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
4) Exit Channel Crest:	<u>1098.0</u>	<u>0.75</u>	<u>3.73</u>
5) Top of embankment:	<u>1101.0</u>	<u>0.89</u>	<u>6.18</u>

4. PRINCIPAL SPILLWAY: N/A
- Pipe length _____ ft.
 - Pipe diameter _____ in.
 - Pipe slope _____ %
 - Riser diameter _____ in.
 - Riser height _____ ft.
 - Type of pipe _____
 - Number of anti-seep collars _____; spacing along pipe _____ ft.
 - Does the design include a trash rack? _____ Yes, _____ No.
 - Does the design include an anti-vortex device? _____ Yes, _____ No.
5. EMERGENCY SPILLWAY/EXIT CHANNEL:
- Base width 12 ft.
 - Design flow depth 0.9 ft. Depth in level section 0.9 ft.
 - Exit slope 3.8 %
 - Exit velocity 3.4 fps
 - Channel lining Grass Mixture
 - Side slopes 2:1
 - Freeboard 2.1 ft.
 - Entrance slope 50 %
 - Length of level section 20 ft.
6. The minimum static factor of safety for this impoundment is 1.5
7. Provide as an addendum to this attachment a detailed plan view or 2 cross sections of the impoundment.
8. COMMENTS:
9. Is this an MSHA structure? _____ Yes, X No. If "yes," provide the MSHA ID. number if one has been assigned _____.
10. If this is to be retained as a permanent impoundment, submit an addendum to this attachment demonstrating compliance with rule 1501:13-9-04(H) (2) of the Administrative Code.
11. I hereby certify that this impoundment is designed to comply with the applicable requirements of rule 1501:13-9-04 of the Administrative Code using current, prudent engineering practices.

Donald M. Brafford
Signature

10-9-01
Date

P.E. SEAL

